

SYLLABUS

I. GENERAL DATA ON SUBJECT COURSE	
CODE AND NAME OF SUBJECT (in Estonian and English)	ATS.061 Õhusõidukid/ Aircraft
ACADEMIC YEAR, TERM	2020/2021, autumn and spring semester, daytime studies
CURRICULUM, SPECIALITY AND MODULE WHERE THE SUBJECT BELONGS TO	Curriculum: Air Traffic Services (2282), Module of Basic Speciality Studies, Year 3
VOLUME OF SUBJECT (ECTS)	3,0 ECTS
FORM OF CONTROL	Non - differential
WORKLOAD AND FORMAT OF STUDIES	Independent work with E-aid – 31 h, class studies – 14h
LANGUAGE OF INSTRUCTION	Estonian, English
ADDITIONAL INFORMATION (PREREQUISITE SUBJECT COURSES, RESTRICTIONS)	Prerequisite course of Aerodynamics recommended
LECTURER	Jaan Susi, Jaan Annus

II. GOAL OF SUBJECT, LEARNING OUTCOMES AND SHORT DESCRIPTION OF THE COURSE	
GOAL OF SUBJECT COURSE	The goal of the subject is to explain the basic principles of the theory of flight and aircraft characteristics, their influence on ATC operations.
LEARNING OUTCOMES	Knows the relations between units of measurement used in aviation, describes various types of aircraft and their performance, recognizes the basic forces acting on an aircraft, describes the categorization of aircraft by type, approach speed, wake turbulence and noise, describes and analyses the principles of work of different aircraft engines and aircraft instrumentation.
SUBJECT COURSE DESCRIPTION	

III. GRADING SYSTEMS AND CRITERIA	
PREREQUISITES TO BE ALLOWED TO TAKE EXAMINATION/PRELIMINARY EXAMINATION	All of the students, having passed the course, have the right to pass examination. The fact of passing the course is confirmed by passing self-assessment tests in Moodle.
FORMATION OF EXAMINATION MARK/OF PRELIMINARY EXAM	The final result will be determined by the final test to be passed in Moodle.
OPPORTUNITIES FOR SETTLING ARREARS/INSUFFICIENCIES IN ACADEMIC PROGRESS	The students can retake the exam once before the end of semester.
GRADING SYSTEM	RESPECTIVE MARKING CRITERIA
1. Self-testing	Obligatory but not taken into account in final testing
2. Written test	Final written test should be passed with 75% efficiency.

IV. SCHEDULE AND LIST OF TOPICS			
WEEK OF YEAR	WORK FORMAT	TOPICS	LECTURER
	Class/1h	ACFTB 1.2 Introduction.	
	E-learning/4 h	ACFTB 1.1 Units of measurement	
	E-learning/6h	ACFTB 3.1; ACFTB 4.1 Types of aircraft	
	E-learning/6h	ACFTB 2.1; ACFTB 2.2; ACFTB 2.3 Principles of flight	
	Seminar/2h	Seminar for topics 1 and 2	
	E-learning/4h	ACFTB 3.2; ACFT 3.3 Wake turbulence and approach categories	
	E-learning/4h	ACFTB 3.4 Environmental categories	
	E-learning/4h	ACFTB 4.2 Data for most commonly used aircraft	
	Seminar/2h	Seminar for topics 3 and 4.	
	E-learning/5h	ACFTB 5.1 Piston engines	
	E-learning/5h	ACFTB 5.2 Jet engines	
	E-learning/4h	ACFTB 5.3 Turboprop engines	
	E-learning/2h	ACFTB 5.4 Aviation fuels	
	E-learning/5h	ACFTB 6.1;ACFTB 6.2; ACFTB 6.3 Aircraft instruments	
	E-learning/5h	ACFTB 6.4 Aircraft systems	
	Seminar/2h	Seminar for topics 5 and 6.	
	Class/6h	ACFTB 7.1;ACFTB 7.2; ACFTB 7.3;ACFTB 7.4; ACFTB 7.5; ACFTB 7.6; ACFTB 7.7 Factors affecting aircraft performance: during take-off, climb, cruise,descent and initial approach, final approach, landin; economic and environmental factors	
	Class/2h	Examination test	

V. LEARNING MATERIALS
<u>Compulsory materials:</u> 1) Aircraft – E-aid , Moodle
<u>Additional materials recommended:</u> 1) ATPL ground training series